

CLAIMS

The invention claimed is:

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1. A method comprising:
computing a bandwidth constrained frame rate from a frame size of an imager and a
bandwidth of a link; and
determining whether the computed bandwidth constrained frame rate is smaller than a
requested rate of video frames from the imager, and if so, determining an integration time of
pixels of the imager from the computed bandwidth constrained frame rate.
 2. The method of claim 1, wherein the integration time is determined to result in the
imager outputting video frames at a rate commensurate with the bandwidth constrained frame
rate.
 3. The method of claim 1, wherein the bandwidth constrained frame rate is computed
also from a compression ratio of the imager.
 4. The method of claim 1, wherein the integration time is determined also from a
numerical inverse of the computed bandwidth constrained frame rate.
 5. The method of claim 1, further comprising:
determining a gain of the imager from the determined integration time.
 6. An article comprising: a storage medium, the storage medium having stored thereon
instructions, which, when executed by a computing device, result in:
computing a bandwidth constrained frame rate from a frame size of a video camera
and a bandwidth of a link; and
determining whether the computed bandwidth constrained frame rate is smaller than a
requested rate of video frames from the camera, and if so, determining an integration time of
pixels of the camera from the computed bandwidth constrained frame rate.
 7. The article of claim 6, wherein when the instructions are executed, the integration
time is determined to result in the camera outputting video frames at a rate commensurate
with the bandwidth constrained frame rate.

8. The article of claim 6, wherein when the instructions are executed, the bandwidth constrained frame rate is computed also from a compression ratio of the video camera.

9. The article of claim 6, wherein when the instructions are executed, further result in:
5 computing a numerical inverse of the computed bandwidth constrained frame rate.

10. The article of claim 6, wherein when the instructions are executed, further result in:
determining a gain of the camera from the determined integration time.

10 11. An image processing station for coupling to an imager by a communication link, the image processing station comprising: a computer readable storage medium containing a program for outputting through the link at least one operating parameter of the imager, the program comprising

15 software for computing a bandwidth constrained frame rate from a frame size of the imager and a bandwidth of the link; and

software for determining whether the computed bandwidth constrained frame rate is smaller than a requested rate of video frames from the imager, and if so, for determining an integration time of pixels of the imager from the computed bandwidth constrained frame rate.

20 12. The image processing station of claim 11, wherein the software for determining the integration time determines an integration time to result in the imager outputting video frames at a rate commensurate with the computed bandwidth constrained frame rate.

25 13. The image processing station of claim 11, wherein the software for computing the bandwidth constrained frame rate also uses a compression ratio of the video imager.

14. The image processing station of claim 11, wherein the software for determining an integration time computes a numerical inverse of the computed bandwidth constrained frame rate.

30 15. The image processing station of claim 14, wherein the program further comprises: software for determining a gain of the imager from the determined integration time.